

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for processing data packets comprising:

- receiving multiple ~~types of~~ data packets[[,]];
- processing the received data packets to identify a data type for each received data packet;
- sending the processed data packets to multiple data paths including
 - _____ sending a first ~~predetermined type of~~ data packet to a first data path selected based on an identified data type of the first data packet, and
 - _____ sending a second ~~predetermined type of~~ data packet to a second data path selected based on an identified data type of the second data packet;[[,]] and
 - using another data path different from the first and second data paths to communicate ~~communicating~~ in advance at least the identified data types of the first and second data packets received to an arbitrator of one or more ~~a shared resources~~ shared by [[of]] at least the first and second data paths before the arbitrator receives the sent data packets.

2. (currently amended) The method of claim 1, further comprising:

determining ~~selecting~~ how to handle the sent data packets based on the communicated data types of at least the first and second data packets.

3. (currently amended) The method of claim ~~[[1]]2~~, ~~further comprising wherein determining how to handle the sent data packets comprises:~~

sending each of the at least first and second data packets to one of the resources shared by at least the first and second data paths ~~selecting data packets for a shared resource of the data paths~~ based on the communicated data types of the at least first and second data packets.

4. (currently amended) The method of claim ~~[[1]]2~~, ~~further comprising wherein determining how to handle the sent data packets comprises:~~

dropping at least one of the ~~selecting a shared resource to send a~~ sent data packets based on the communicated data types of at least the first and second data packets.

5. (currently amended) The method of claim 1 wherein sending further comprises sending a third ~~predetermined type of~~ data packet to a third data path selected based on a data type of the third data packet.

6. (currently amended) The method of claim 1 wherein communicating further comprises communicating ~~[[the]]~~ an order ~~that cf the data packets were received.~~

7. (currently amended) The method of claim 1 wherein the data type of the first ~~predetermined type of~~ data packet[[s]] [[are]]comprises a non-IP multicast packet[[s]], and the data type of the second ~~predetermined type of~~ data packet[[s]] [[are]]comprises an IP multicast packet[[s]].

8. (currently amended) A computer program product, embodied ~~disposed~~ on a computer readable medium, ~~for processing data packets comprising instructions for causing a processor~~ operable to cause a data processing apparatus to perform operations comprising:

receiving ~~receive~~ multiple types of data packets[[,]]; processing the received data packets to identify a data type for each received data packet;

sending the processed data packets to multiple data paths including

_____ sending a first ~~predetermined type of~~ data packet to a first data path selected based on an identified data type of the first data packet, and

_____ sending a second ~~predetermined type of~~ data packet to a second data path selected based on an identified data type of the second data packet;[[,]] and

using another data path different from the first and second data paths to communicate in advance at least the identified data types of the first and second data packets ~~received~~ to an arbitrator of one or more ~~a shared~~ resources shared by [[of]] at least the first and second data paths before the arbitrator receives the sent data packets.

9. (currently amended) The computer program product of claim 8 further ~~comprises instruction for causing a processor~~ operable to cause the data processing apparatus to:

determine select how to handle the sent data packets based on the communicated data types of at least the first and second data packets.

10. (currently amended) The computer program product of claim 8 further ~~comprises instruction for causing~~ operable to cause a processor the data processing apparatus to:

sending each of the at least first and second data packets to one of the resources shared by at least the first and second data paths ~~select data packets for a shared resource of the data paths~~ based on the communicated data types of the at least first and second data packets.

11. (currently amended) The computer program product of claim 8 further ~~comprises instruction for causing~~ operable to cause a processor the data processing apparatus to:

dropping at least one of the ~~select a shared resource to send a sent~~ data packets based on the communicated data types of at least the first and second data packets.

12. (currently amended) The computer program product of claim 8 further ~~comprises instruction for causing a processor~~ operable to cause the data processing apparatus to:

send a third ~~predetermined type of~~ data packet to a third data path selected based on a data type of the third data packet.

13. (currently amended) The computer program product of claim 8 ~~further comprises instruction for causing a processor operable to cause the data processing apparatus to:~~

~~communicate further comprises communicating the an order that of the data packets were received.~~

14. (currently amended) The computer program product of claim 8 further operable to cause the data processing apparatus to:

send wherein the first predetermined type of data packet[[s]] to the first data path selected based on the data type of the first data packet that includes a[[are]] non-IP multicast packet[[s]]; and

send the second predetermined type of data packet[[s]] to the second data path selected based on the data type of the second data packet that includes an [[are]]IP multicast packet[[s]].

15. (currently amended) A system for processing a data packet, the system comprising:

at least one communication port;

at least one Ethernet MAC (Medium Access Control) device coupled to at least one of the at least one communication ports;
and

at least one processor having access to at least one Ethernet MAC device[[;]] ~~and instructions for causing the at least one processor configured to perform operations comprising:~~
receiving receive multiple types of data packets[[,]]; processing the received data packets to identify a data type for each received data packet;

sending the processed data packets to multiple data paths including

_____ sending a first ~~predetermined type of~~ data packet to a first data path selected based on an identified data type of the first data packet, and

_____ sending a second ~~predetermined type of~~ data packet to a second data path selected based on an identified data type of the second data packet; [[,]] and

using another data path different from the first and second data paths to communicate in advance at least the identified data types of the first and second data packets ~~received to an arbitrator of one or more a shared resources~~ shared by [[of]] at least the first and second data paths before the arbitrator receives the sent data packets.

16. (currently amended) The system of claim 15-~~further comprises instruction for causing~~ wherein the at least one processor is further configured to:

determine ~~select~~ how to handle the sent data packets based on the communicated data types of at least the first and second data packets.

17. (currently amended) The system of claim 15-~~further comprises instruction for causing~~ wherein the at least one processor is further configured to:

send each of the at least first and second data packets to one of the resources shared by at least the first and second data paths ~~select data packets for a shared resource of the data paths~~ based on the communicated data types of the at least first and second data packets.

18. (currently amended) The system of claim 15 ~~further comprises instruction for causing wherein the~~ at least one processor is further configured to:

drop at least one of the select a shared resource to send a sent data packets based on the communicated data types of at least the first and second data packets.

19. (currently amended) The system of claim 15 ~~further comprises instruction for causing wherein the~~ at least one processor is further configured to:

send a third predetermined type of data packet to a third data path selected based on a data type of the third data packet.

20. (currently amended) The system of claim 15 ~~further comprises instruction for causing wherein the~~ at least one processor is further configured to:

communicate further comprises communicating [[the]] an order that of the data packets were received.

21. (currently amended) The system of claim 15 wherein the at least one processor is further configured to:

send the first predetermined type of data packet [[s]] to the first data path selected based on the data type of the first data packet that includes a [[are]] non-IP multicast packet [[s]]; and

send the second predetermined type of data packet [[s]] to the second data path selected based on the data type of the second data packet that includes an [[are]] IP multicast packet [[s]].

22. (currently amended) A device for processing data packets comprising:

a module to receive ~~multiple types of~~ data packets ~~[[,]]~~ and identify a data type for each received data packet;

a module to send the received data packets to multiple data paths including

_____ sending a first ~~predetermined type of~~ data packet to a first data path selected based on an identified data type of the first data packet, and

_____ sending a second ~~predetermined type of~~ data packet to a second data path selected based on an identified data type of the second data packet;[[,]] and

a module ~~[[to]]~~ that uses another data path different from the first and second data paths to communicate in advance at least the identified data types of the first and second data packets received to an arbitrator of one or more a shared resources shared by [[of]] at least the first and second data paths before the arbitrator receives the sent data packets.

23. (currently amended) The device of claim 22 further comprises:

a module to determine ~~select~~ how to handle the sent data packets based on the communicated data types of at least the first and second data packets.

24. (currently amended) The device of claim ~~22 further comprises~~ 23 wherein the module to determine how to handle the sent data packets is further configured to:

a module to send each of the at least first and second data packets to one of the resources shared by at least the first and second data paths ~~select data packets for a shared resource of~~

~~the data paths~~ based on the communicated data types of the at least first and second data packets.

25. (currently amended) The device of claim ~~22 further comprises~~ 23 wherein the module to determine how to handle the sent data packets is further configured to:

drop at least one of the ~~a module to select a shared resource to send a~~ sent data packets based on the communicated data types of at least the first and second data packets.

26. (currently amended) The device of claim 22 further comprises:

a module to send a third ~~predetermined type of~~ data packet to a third data path selected based on a data type of the third data packet.

27. (currently amended) The device of claim 22 wherein the module to communicate is further ~~comprises~~ configured to:

communicate an ~~communicating the order that~~ of the data packets ~~were~~ received.

28. (currently amended) The device of claim 22 wherein the module to send the data packets is further configured to

send the first ~~predetermined type of~~ data packet [[s]] to the first data path selected based on the data type of the first data packet that includes a [[are]]non-IP multicast packet[[s]]; and

send the second ~~predetermined type of~~ data packet [[s]] to the second data path based on the data type of the second data packet that includes an [[are]]IP multicast packet[[s]].